# VWYASAGAR UMVERSITY

A Project Work

On

A Comparison study on Health Status between Rural Hypertensive Housewife and Normal Housewife(30-40)

This project work is submitted for the partial fulfillment for the award of degree of B.Sc. (Hons) from Vidyasagar University



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Vocabulary finds no appropriateness to express my heartfelt love and thanks from the very core of my heart to my classmates and juniors for their constant encouragement and help throughout the study.

Date: 20/02/2024

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#### TO WHOM IT MAY CONCERN

This is to certify that Sumana Bhunia (Roll:1125129 No.: 210145 Regn. No.: VU211022858 of Session: 2023-2024) a student of B.Sc. Part –III, Dept. of Nutrition, under Vidyasagar University, Purba Medinipur, has completed her project work under my guidance on the topics 'A comparison Study on Health Status between Rural Hypertensive housewife and Normal housewife 'for the partial fulfillment for the award of degree of B.Sc. from Vidyasagar University.

I am satisfied for her performance. She is energetic and up to date in her work; I wish success in her life.

Date: .....

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# A Comparison study on Health Status between Rural hypertensive housewife and normal housewife.

#### **ABSTRACT**

Pregnancies complicated by new-onset hypertension are associated with increased sensitivity to angiotensin II, but it is unclear whether this sensitivity persists postpartum. We studied pressor response to infused angiotensin II in 25 normotensive postpartum women in both high- and low-sodium balance. Ten women had a history of hypertensive pregnancy (5 with preeclampsia; 5 with transient hypertension of pregnancy), and 15 women had a history of uncomplicated, normotensive pregnancy. Systolic and diastolic blood pressures, aldosterone, and soluble fms-like tyrosine kinase 1 levels were measured before and after angiotensin Il infusion in both dietary phases. In high sodium balance, women with a history of hypertensive pregnancy were normotensive but had significantly higher systolic and diastolic blood pressures than controls (115 versus 104 mm Hg and 73 versus 65 mm Hg, respectively; P<0.05). Women with a history of hypertensive pregnancy had a pressor response to salt loading, demonstrated by an increase in systolic blood pressure on a high-salt diet. They also had greater systolic pressor response (10 versus 2 mm Hg; P=0.03), greater increase in aldosterone (56.8 versus 30.8 ng/dL; P=0.03), and increase in soluble fms-like tyrosine kinase 1 levels (11.0 versus -18.9 pg/mL; P=0.02) after infusion of angiotensin II in low-sodium balance compared with controls. Thus, women with a history of hypertensive pregnancy demonstrated salt sensitivity of blood pressure and had increased pressor, adrenal, and soluble fms-like tyrosine kinase 1 responses to infused angiotensin II in lowsodium balance. Increased sensitivity to angiotensin II observed during pregnancy in women with hypertensive pregnancy is present postpartum; this feature may contribute to future cardiovascular risk in these women.

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#### **LIST OF ABBREVIATION**

SAHM= *stay*-at-home mother

SAHD=stay-at-home father

WHO= World Health Organization

BMI=Body Mass Index

WHR=Waist Hip Ratio

SBP= Systolic Blood Pressure

DSP= Diastolic Blood Pressure

SD=Standard Deviation

SE=Standard Error



Plate 1: Different activities during survey of Rural Hypertensive housewife of Bhagwanpur-II Block area



Plate 2: Different activities during survey of Rural Normal housewife of Bhagwanpur-II Block area